STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION SOLID WASTE PROGRAM and CONTAMINATED SITES PROGRAM

SEAN PARNELL, GOVERNOR

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February 25, 2011

Dale Greinke Weston Solutions, Inc. 915 30th Ave. Suite 111 Fairbanks, AK 99701

Subject: Port Heiden PCB Contaminated Soils - Proposed Corrective Action Approach Comments

Dear Mr. Greinke:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the Weston Solutions, Inc. (Weston) Proposed Corrective Action Approach, received February 17, 2010. The Proposed Corrective Action Approach outlines a path forward for development of a work plan for remediation of contamination, at the Port Heiden Landfill and the soil washing area, discovered after completion of a cleanup project at the U.S. Air Force Port Heiden Radio Relay Station (Port Heiden RRS).

For the original Port Heiden RRS cleanup project, the final Work Plan, dated March 2009, requires soil with a concentration of polychlorinated biphenyls (PCBs) greater than 1 mg/kg to be excavated. As a part of the project, in conjunction with the Native Council of Port Heiden, Weston received ADEC approval to dispose of soil with a PCB concentration of less than 10 mg/kg in the Port Heiden landfill. Excavated soil less than 10 mg/kg PCBs was to be directly disposed at the landfill, and soil greater than 10 mg/kg PCBs was to be washed by the approved process to less than 10 mg/kg PCBs, then disposed at the landfill. Subsequent third party (AECOM) sampling indicates PCB levels as high as 74 mg/kg in the landfill, and 27 mg/kg in the soil washing area. Although the source of these discrepancies is under investigation, all parties have agreed that as primary contractor, Weston is responsible for corrective action at the sites.

ADEC has the following comments on the Weston Proposed Corrective Action Approach:

Further Data Analysis

Weston has provided a fate and transport model for 30 mg/kg and 50 mg/kg PCB contaminated soil to support their request to leave soils that were not washed prior to disposal in the landfill, but have tested above 10 mg/kg PCBs. Based on a review of the screening versus analytical data presented in the final report on the Port Heiden RRS project, ADEC has concerns with the efficacy of Weston's use of screening samples to accurately determine PCB contamination levels. ADEC will require Weston to submit a correlation study for all samples that were analyzed by both field screening and laboratory methods. Also, Weston must calculate the 95% Upper Confidence Limit (UCL) for PCB levels, for any soil that they are requesting to leave in place at the landfill, using the AECOM landfill sampling data including duplicate samples. ADEC will review the analyses and may require additional characterization of the landfill and/or additional removal of PCB contaminated soil at the landfill based on the results.

Confirmation Sampling Requirements

ADEC will require confirmation samples to be collected using EPA hexagonal grid sampling methodology (Field Manual For Grid Sampling of PCB Spill Sites to Verify Cleanup May 1986). Specifically, an excavated area will be subdivided into 15-foot squares. Centered within each of these squares will be four 5-foot square grids. Composite samples will be collected from the nine points of intersection created by these 5-foot grids. One dedicated steel sampling spoon will be used to scoop soil from each of the nine locations. ADEC will require sidewall PCB confirmation samples be collected at a frequency of one sample per each 20 linear feet (or portion thereof) of the sidewall for each excavated lift. Excavation will continue until PCB analytical results are less than or equal to 10 mg/kg for samples from the landfill and less than or equal to 1 mg/kg for samples from the soil washing area.

<u>Landfill</u>

1) b) ii) Text states: "...using visual and olfactory methods to guide excavation. Excavation will continue until the depth of the original landfill floor has been reached."

ADEC will require confirmation samples from the floor and sidewalls of the excavation that meet the confirmation sampling requirements above.

Excavation will continue until PCB analytical results are less than 10 mg/kg. The extent of excavation is undetermined at this point in time since PCB infused alcohol used as part of the soil washing may have migrated in this area to depths greater than the original landfill floor.

v) Text states: "Excavation will be backfilled with excavated soil from the soil washing area with PCB levels less than 10 mg/kg."

Any additional disposal of PCB contaminated soil will require approval of the ADEC Solid Waste Program AND the Native Village of Port Heiden. If approval for disposal of additional contaminated soil at the landfill is not received, soils must be transported to an off-site disposal facility in the Lower 48 and Weston must backfill the excavation with clean soil and grade the site to the original contours of the landfill.

Soil Washing Area Overview

1) b) Text states: "...the same site investigation surface soil sample locations will be used to collect additional soil samples at depth in order to characterize the subsurface soil."

See comment above regarding required confirmation sampling requirements.

2) Text states: "Sampling of the soils in the settling tank areas will start at the depth where the bottoms of the tanks were located."

See comment above regarding required confirmation sampling requirements.

5) Text states: "Transport PCB contaminated soils greater than 1 mg/kg but less than 10 mg/kg to landfill."

See comment above regarding additional disposal of PCB contaminated soil at the landfill.

Soil Washing Area – Sampling Activities

3) Text states: "Sample in grid max 30 x 30 or ~ 65 samples per lift. Take discrete samples at 4-in intervals starting at 4-inches below ground surface (bgs) down to 40 inches bgs."

See comment above regarding required confirmation sampling requirements.

Excavation will continue until PCB analytical results are less than 1 mg/kg. The depth of excavation is undetermined at this point in time since PCB infused alcohol used as part of the soil washing may have migrated in this area to depths greater than 40 inches.

5) Text states: "If the surface soil sample result is less than 1 mg/kg then this location requires no additional subsurface sampling and no soil removal." Previous statement in this document stated: "(The surface soil (0-4 inches bgs) was already characterized during the AECOM site investigation so these samples will not be recollected.)"

Please clarify whether or not any surface soil sampling will be done in accordance with 1986 EPA guidance on grid sampling.

Soil Washing Area - Removal Activities

1) Text states: "Excavated on a 30 foot by 30 foot grid. Each discrete sample is located at the center of each grid square and will characterize the soils of that grid square."

See comment above regarding required confirmation sampling requirements.

Excavation will continue until PCB analytical results are less than or equal to 1 mg/kg. The depth of excavation is undetermined at this point in time since PCB infused alcohol used as part of the soil washing may have migrated in this area to depths greater than 40 inches.

3) Text states: "Transport soils greater than 1 mg/kg but less than 10 mg/kg to landfill."

See comment above regarding additional disposal of PCB contaminated soil at the landfill.

Please contact Lori Aldrich at (907) 269-7622 or by email at <u>Lori.Aldrich@Alaska.gov</u> or Louis Howard at (907) 269-7552 / <u>Louis.Howard@Alaska.gov</u> if you have any comments or questions.

Sincerely,

Lori Aldrich

Solid Waste Program Coordinator

Louis Howard

Environmental Program Specialist

cc: Glen VerPlanke/Pat Roth/Kevin Thomas, USAF
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Skip Koch/ Scott Blount/Rich Vicente, Weston
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